In the Claims:

1. (Currently Amended): A solar heat transfer system comprising:

a one-way out pressurizing pressure relief valve;

a one-way in vacuum fluid recovery valve;

the pressure relief valve and the vacuum fluid recovery valve being plumbed in parallel from the highest single point in the solar heat transfer system to below the fluid level of an unpressurized overflow/recovery reservoir;

the solar heat transfer system configured to accommodate fluid thermal expansion and contraction in a heat transfer loop by allowing fluid to enter and leave the solar heat transfer system, wherein the heat transfer loop ~~displaces~~ keeps air ~~with~~ out ~~fluid~~.

2. (~~Currently Amended~~Previously Presented): A fluid heat transfer loop over-temperature protection device comprising:

a solar heat transfer system configured to accommodate fluid thermal expansion and contraction in a heat transfer loop;

an overflow/recovery reservoir; and

a gas condensing assembly comprising:

a one-way out pressure relief valve fluidly connected to the overflow/recovery reservoir;

a one-way in vacuum fluid recovery valve fluidly connected to the overflow/recovery reservoir; and

a liquid-to-air radiator arranged in series with the one-way out pressure relief valve and the one-way in vacuum fluid recovery valve;

wherein the gas condensing assembly is located between the highest point on the heat transfer loop and the solar heat transfer system and is plumbed in parallel from the highest point in the system above the radiator to below the fluid level of an unpressurized overflow/recovery reservoir; and

wherein overflow fluid flows through the one-way out pressure relief valve to the overflow/recovery reservoir, and replacement fluid is drawn through the one-way in vacuum fluid recovery valve from the overflow/recovery reservoir into the gas condensing assembly.

3. (~~Currently Amended~~Previously Presented): A solar collector over-temperature protection device comprising:

at least one absorber plate;

one or more air dampers;

an overflow/recovery reservoir;

a gas pressure-actuated piston; and

a heat transfer loop system fluidly connected to the pressure activated piston, comprising:

a one-way out pressure relief valve fluidly connected to the overflow/recovery reservoir; and

a one-way in vacuum fluid recovery valve fluidly connected to the overflow/recovery reservoir;

the one-way out pressure relief valve and one-way in vacuum fluid recovery valve plumbed in parallel from the highest point in heat transfer loop system to below the fluid level of an unpressurized overflow/recovery reservoir, and to open air dampers that allow outside air to flow over and cool the solar collector's absorber plate, wherein the piston pressure input is connected between the solar collector and the device to accommodate fluid thermal expansion/contraction by allowing fluid to enter and leave the solar heat transfer system, wherein the heat transfer loop system displaces air with fluid; and

wherein overflow fluid flows through the one-way out pressure relief valve to the overflow/recovery reservoir, and replacement fluid is drawn through the one-way in vacuum fluid recovery valve from the overflow/recovery reservoir into the heat transfer loop system.

4-12. (Canceled):

13. (Currently Amended): A solar collector over-temperature protection device comprising:

a gas condensing liquid-to-air radiator;

a pressure-actuated piston operated air dampers;

and a ~~fluid thermal expansion/contraction assembly comprising:~~

~~the pressure-actuated piston according to Claim 3;~~

~~the liquid-to-air radiator according to Claim 2; and~~

~~the solar heat transfer system according to Claim 1.~~

one-way out pressurizing pressure relief valve;

a one-way in vacuum fluid recovery valve;

the pressure relief valve and the vacuum fluid recovery valve being plumbed in parallel from the highest single point in the solar heat transfer system to below the fluid level of an unpressurized overflow/recovery reservoir;

the solar heat transfer system configured to accommodate fluid thermal expansion and contraction in a heat transfer loop by allowing fluid to enter and leave the solar heat transfer system, wherein the heat transfer loop keeps air out .